

United States Department of the Interior

BUREAU OF RECLAMATION

Great Plains Region Montana Area Office P.O. Box 30137 Billings, Montana 59107-0137



June 30, 2014

FAXOGRAM: Water Order Change

MT-450

To: Chief, Power Supply and Billing Division, WAPA, Watertown, South Dakota

Attention: F-6001

Chief, Power Dispatching Branch, WAPA, Loveland, Colorado

Attention: J-4120

Facilities Manager, Hardin, Montana Attention: MT-300: Tom Tauscher Project Manager, Mills, Wyoming Attention: WY-4000, WY-4100, WY-6040

Assistant Superintendent, National Park Service, Lovell, Wyoming

Attention: Valerie Newman

From: Reservoir and River Operations, Billings, Montana /s/ Clayton R. Jordan

Subject: Yellowtail Water Release Order - BHR No. 14-60

CURRENT RESERVOIR CONDITIONS:

Elevation: 3635.85; Storage: 971,076 acre-feet; River Release: 2,865 cfs; Inflow: 8,785 cfs;

GENERAL COMMENTS:

Bighorn Lake is nearing normal full pool of 3640.0 feet and inflow has increased with higher releases from Boysen and Buffalo Bill Reservoirs. To control the rate of fill, the following operations are required at Yellowtail Dam and Powerplant and Yellowtail Afterbay Dam.

SPECIAL NOTE: To provide the proper mixing of water releases to the Bighorn River in attempt to minimize PSAT levels, it is desirable to maintain the Yellowtail Afterbay Reservoir between a maximum elevation of 3192.0 feet and a minimum elevation of 3184.6 feet and provide a mixing flow of approximately 75% through the spillway gates and 25% through the sluice gates, plus or minus 10%.

YELLOWTAIL TURBINE RELEASE:

At 1600 hour on Monday, June 30, 2014:

Increase average daily turbine release to 3,430 cfs (\approx 2,770 MW-Hours/day using 29.7 cfs/mw).

At 1600 hour on Tuesday, July 1, 2014:

Increase average daily turbine release to 3,930 cfs ($\approx 3,175$ MW-Hours/day using 29.7 cfs/mw).

At 1600 hour on Wednesday, July 2, 2014:

Increase average daily turbine release to 4,430 cfs (≈ 3,580 MW-Hours/day using 29.7 cfs/mw).

Restrict and limit turbine release to 3-unit capacity.

AFTERBAY RELEASE AND OPERATION:

At 1600 hour on Monday, June 30, 2014:

Maintain diversions to the Bighorn Canal at 0 cfs.

Increase river release to 3,500 cfs (gage height = 61.39 with a -0.65 shift).

Increase total release from the Afterbay to 3,500 cfs.

At 1600 hour on Tuesday, July 1, 2014:

Maintain diversions to the Bighorn Canal at 0 cfs.

Increase river release to 4,000 cfs (gage height = 61.71 with a -0.65 shift).

Increase total release from the Afterbay to 4,000 cfs.

At 1600 hour on Wednesday, July 2, 2014:

Maintain diversions to the Bighorn Canal at 0 cfs.

Increase river release to 4,500 cfs (gage height = 62.01 with a -0.65 shift).

Increase total release from the Afterbay to 4,500 cfs.